

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended). Scattered light smoke detector with an optical measuring chamber, comprising:

~~having~~ a sensor arrangement (2) with at least one light source (12, 12') and one light receiver (11);

~~and~~ a labyrinth system (7) with screens (16) arranged on the periphery of the measuring chamber;

~~the at least one light source (12, 12') and the light receiver (12, 12') each being arranged in a housing (14, 15; 13), characterized in that the above mentioned a housing having housings (14, 15; 13) have an elongated shape and a small window opening;~~ and,

wherein that the at least one light source (12, 12') and light receiver (11) are arranged in the a rear part of their housings (14, 15; 13) the housing, so that between the window ~~openings~~ opening of the ~~housings (14, 15; 13) housing~~ and the a light-penetrated optical surfaces surface of the at least one light source (12, 12') and/or light receiver (11) a relatively large gap is formed.

Claim 2 (currently amended). ~~The smoke~~ Smoke detector ~~according to~~ of Claim 1, ~~characterized in that wherein~~ the ~~stated~~ gap is greater than the diameter of the ~~stated optical surfaces surface~~.

Claim 3 (currently amended). ~~The smoke~~ Smoke detector ~~according to~~ of Claim 1 ~~or 2~~, ~~characterized in that wherein~~ the measuring chamber is delimited upward by a carrier disc (6), from which the ~~stated housings (14, 15; 13) extend~~ housing extends downward,

and that the labyrinth system (7) forms a lid-like component which can be fixed to the carrier disc and has a floor and a side wall, and which can be plugged onto the carrier disc (6) from below.

Claim 4 (currently amended). ~~The smoke~~ Smoke detector according to of Claim 1 ~~or 2~~, characterized in that wherein at least one of the window openings opening of the ~~above-mentioned housings (14, 15)~~ housing is enclosed by a one-part frame.

Claim 5 (currently amended). ~~The smoke~~ Smoke detector according to of Claim [4] 3, characterized in that wherein the ~~above-mentioned housings (14, 15; 13)~~ housing, apart from the window openings opening, ~~are~~ is open downward, and ~~that~~ the floor of the ~~above-mentioned~~ component has lids for the housing ~~housings (14, 15; 13)~~.

Claim 6 (currently amended). ~~The smoke~~ Smoke detector according to ~~one of Claims~~ Claim 3 to 5, characterized in that wherein in the measuring chamber between ~~the~~ a light exit and an entry side of the housing ~~housings (14, 15; 13)~~ and the screens (16) opposite them, a compact, open scattering space is formed.

Claim 7 (currently amended). ~~The smoke~~ Smoke detector according to ~~one of Claims 3 to Claim 6~~, characterized in that wherein the housings (14, 15; 13) have housing has grooves for fixing polarisation filters.

Claim 8 (currently amended). ~~The smoke~~ Smoke detector according to ~~one of Claims 3 to Claim 7~~, characterized in that wherein the surfaces, which face each other, of the carrier disc (6) and the floor of the component which forms the labyrinth system (7) have corrugation.

Claim 9 (currently amended). ~~The smoke~~ Smoke detector according to of Claim 8, characterized in that wherein the screens (16) and the corrugated surfaces of the carrier disc (6) and of the floor of the ~~above-mentioned~~ component have a glossy surface.

Claim 10 (currently amended). ~~The smoke~~ Smoke detector according to one of Claims 1 to 9 ~~Claim 6, characterized in that~~ wherein the screens (16) which are arranged on the periphery of the measuring chamber and are substantially L-shaped, the shorter leg pointing into the measuring chamber, and ~~that~~ the gap between adjacent screens (16) is a multiple of their thickness.

Claim 11 (currently amended). ~~The smoke~~ Smoke detector according to one of Claims ~~Claim 3 to 10, characterized in that~~ wherein on the carrier disc (6), a multiple plug (5) for the electrical connection of the detector to a plug connector (4) which is provided in a detector base (1) is arranged, and that the electrical connection is made by a tangential movement of the multiple plug (5) ~~and/or~~ plug connector (4).

Claim 12 (currently amended). ~~The smoke~~ Smoke detector according to of Claim 11, ~~characterized in that~~ wherein the multiple plug (5) is ~~preferably~~ integrated on the top side of the carrier disc (6), in so-called insert technology.

Claim 13 (new). The smoke detector of Claim 7, wherein the screens are arranged on the periphery of the measuring chamber and are substantially L-shaped, the shorter leg pointing into the measuring chamber, and the gap between adjacent screens is a multiple of their thickness.

Claim 14 (new). The smoke detector of Claim 8, wherein the screens are arranged on the periphery of the measuring chamber and are substantially L-shaped, the shorter leg pointing into the measuring chamber, and the gap between adjacent screens is a multiple of their thickness.

Claim 15 (new). The smoke detector of Claim 9, wherein the screens are arranged on the periphery of the measuring chamber and are substantially L-shaped, the shorter leg

pointing into the measuring chamber, and the gap between adjacent screens is a multiple of their thickness.

Claim 16 (new). The smoke detector of Claim 5, wherein on the carrier disc, a multiple plug for the electrical connection of the detector to a plug connector which is provided in a detector base is arranged, and that the electrical connection is made by a tangential movement of the multiple plug or plug connector.

Claim 17 (new). The smoke detector of Claim 7, wherein on the carrier disc, a multiple plug for the electrical connection of the detector to a plug connector which is provided in a detector base is arranged, and that the electrical connection is made by a tangential movement of the multiple plug or plug connector.

Claim 18 (new). The smoke detector of Claim 9, wherein on the carrier disc, a multiple plug for the electrical connection of the detector to a plug connector which is provided in a detector base is arranged, and that the electrical connection is made by a tangential movement of the multiple plug or plug connector.

Claim 19 (new). The smoke detector of Claim 10, wherein on the carrier disc, a multiple plug for the electrical connection of the detector to a plug connector which is provided in a detector base is arranged, and that the electrical connection is made by a tangential movement of the multiple plug or plug connector.

Claim 20 (new). The smoke detector of Claim 19, wherein the multiple plug is integrated on the top side of the carrier disc, in so-called insert technology.